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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,957

01/27/2006

Yves Manin

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EXAMINER

COY, NICOLE A

ART UNIT

PAPER NUMBER

3672

MAIL DATE

DELIVERY MODE

08/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,957	Applicant(s) MANIN ET AL.	
	Examiner NICOLE COY	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iato et al. (USP 5,873,410) in view of Ramos (USP 6,719,048) in further view of Simons (USP 6,196,313).

With respect to claim 1, Iato et al. disclose a method of producing oil from a well comprising: a vertical section (10) extending from the surface to a depth below the oil-producing formation; and a first valve (24), located in the well, and operable to prevent flow of fluid from the vertical section into the sidetrack. Iato does not disclose a sidetrack wellbore. However, Iato discloses that so as to smooth out the production of hydrocarbons, but also the consumption of high-pressure gases, over time, two or more wells may be provided, which are connected to a common outlet 30 and which are arranged in a such a way that, when one is in the blow-off phase, the others are in the filling phase. Ramos teaches a lateral wellbore in which gas and water are separated from each other (see figure 9A). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Iato by including a lateral wellbore as the additional wellbore, in order to smooth out the production of hydrocarbons. It is presumed that the lateral wellbore of Iato in view of Ramos would have the valve

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system contained in seal assembly 26 of Iato. Iato in view of Ramos discloses a method comprising the step of: allowing oil and water to flow into the well via the sidetrack until the hydrostatic pressure of the oil and water in the well balances the formation pressure of the oil-producing formation such that further flow into the well ceases (see column 3 line 63 to column 4 line 12); allowing the oil and water in the vertical section of the well to separate under gravity (see column 4 lines 13-21) so as to produce (i) a lower layer of water, at least part of which is located in the part of the vertical section below the oil-producing formation (see figure 1), and (ii) an upper layer of oil having its upper surface below the well surface and its lower surface above the sidetrack (see figure 4, wherein chamber 40 is below the well surface); forcing the separated oil and water back down the well and operating the first valve such that substantially no fluid is forced into the sidetrack (see column 4 lines 22-31), and water is forced into the underground formation below the oil-producing formation (see figure 1); and allowing oil and water flow to recommence from the sidetrack (see column 5 lines 1-2). Iato in view of Ramos does not disclose a valve within the lateral borehole or at a level within the oil producing formation. However, Iato discloses putting a valve near the formation in order to ensure that fluids do not flow back into the formation. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Iato in view of Ramos by including a valve in the lateral borehole in order to obtain the predictable results of retaining the fluid from the lateral borehole and not allowing it to seep back into the formation.

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lato in view of Ramos does not disclose a valve below the oil producing formation. Simons teaches a valve below the formation in order to allow egress, but not ingress of water. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify lato in view of Ramos by including a second valve below the formation as taught by Simons in order to ensure that water only exits the assembly.

With respect to claim 2, lato in view of Ramos discloses that the separated oil and water are forced down the well until the oil water interface is close to the lower end of the vertical section (see column 4 lines 26-31).

With respect to claim 3, lato in view of Ramos disclose that the steps of flowing, separating, forcing back are repeated until oil flows from the well at the surface (see column 5 lines 1-2, wherein the produced oil exits via 30).

With respect to claim 4, lato in view of Ramos disclose that the step of forcing separated oil and water down the well is performed by applying pressure to the vertical section from the surface (see column 4 lines 26-31).

With respect to claim 5, lato in view of Ramos disclose that the pressure is applied by pumping oil or gas into the vertical section (see column 4 lines 26-31).

With respect to claim 6, lato in view of Ramos disclose that the separated oil and water are forced back down the well such that the water is re-injected into the underground formation below the producing formation (see figure 1).

With respect to claim 7, lato in view of Ramos disclose that the re-injection is performed below the fracture pressure of the underground formation (see figure 3,

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wherein fractures are not formed, so the re-injection is performed below the fracture pressure).

With respect to claim 8, Iato in view of Ramos teaches that the oil is pumped from the well (see column 2 lines 20-40).

Response to Arguments

3. Applicant's arguments filed 3/17/08 have been fully considered but they are not persuasive. While the Examiner agrees that Iato et al. does not disclose a valve in or below the formation, as noted above these features are known and it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Iato in view of Ramos.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE COY whose telephone number is (571)272-5405. The examiner can normally be reached on M-F 7:30-5:00, 1st F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

//William P Neuder//
Primary Examiner, Art Unit 3672

nac